





Nevada Division of **Environmental Protection**

Permitting Information

Thacker Pass Concerned Citizens Community Meeting

22 April 2021

Presented by:

Bureau of Mining Regulation and Reclamation and Bureau of Air Pollution Control





NDEP PERMITTING OVERVIEW – THACKER PASS PROJECT



What State Environmental Permits Does the Mine Need?



What Permits Have Been Applied for?



What is Required in the Applications?

Who Reviews the Permit Applications?



How Long Does it Take?



What Factors Influence the Decision to Issue or Deny a Permit?





How can the Community get Involved in the Permitting Process?

What Happens After NDEP Issues a Permit?



BUREAU OF MINING REGULATION AND RECLAMATION

Two Permits Issued by BMRR and Required to Mine in Nevada:



Reclamation Permit

Ensures the Site is Reclaimed to a Productive Post-Mining Land Use

Cost Estimate and Financial Assurance are Required



Water Pollution Control Permit

Protects Waters of the State from Degradation

BUREAU OF MINING REGULATION AND RECLAMATION

WHAT FACTORS INFLUENCE THE DECISION TO ISSUE OR DENY A PERMIT?

Does the Application Satisfy Applicable State Laws and Regulations?

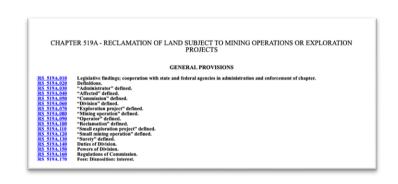
Nevada Laws:

Reclamation of Land Subject to Mining

NRS 519A.010 - 290

Water Pollution Control

NRS 445A.300 – 730



Nevada Regulations:

Reclamation of Mining Operations and Exploration Projects



NAC 519A.010 - 635

Mining Water Pollution Control

NAC 445A.350 - 447

Big Picture Questions:

Will the Site be Left Safe, Stable, and Capable of Providing a Productive Post-Mining Land Use?

Will Waters of the State be Protected from Degradation?

Will Public Safety and Health be Protected?

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WHAT IS A MINING RECLAMATION PERMIT?



Requires a List of Affected Acres of Land, by Disturbance Type

Requires a Plan to Reclaim Disturbance to a Post-Mining Use



List and Plan Inform a Detailed Cost Estimate for Reclamation



Establishment of Financial Assurance Ensures Plan can be Executed

On Public Land, Collaboration with BLM

Cost Estimate Update Every Three Years

Thacker Pass Reclamation Permit

- Reclamation Plan and Cost Estimate Currently Under Review
- Concurrence on Plan, Acreage, and Financial Assurance Coordinated with BLM
- Notice of Final Decision Anticipated in Spring/Summer 2021
- No Public Comment Period (Federal Land Status)
- May Appeal Within 10 Days of Notice of Final Decision
- Decision May be Delayed Pending Legal Challenges to BLM Decision

WHAT IS A MINING WATER POLLUTION CONTROL PERMIT?

- Authorizes the operator to construct, operate, and close the mine in accordance with approved designs and plans.
- Requires the operator to apply to renew the permit every five years
- Does not authorize release or discharge of any contaminants from the mine that have the potential to degrade waters of the State

What Can You Expect to See in the WPC Permit?

List of Fluid Management Systems and how Regulatory Compliance

Will be Demonstrated and Achieved

Monitoring and Reporting Requirements

Permit Modification Requirements

Permit Requirements, Conditions, and Limitations

Accompanying Fact Sheet

MINING WATER POLLUTION CONTROL PERMIT

PERMITTING PROCESS

The Permitting Process Generally Consists of:



Administrative Completeness Review (30 Days; More if Additional Info Needed)



Technical Review (90 Days; More If Additional Info Needed)



Draft Permit and Public Notice



Public Comment Period (30 Days)



Public Hearing if Requested



Opportunities for Community
Engagement



Comment Review

Notice of Decision Regarding Issuance of Permit

MINING WATER POLLUTION CONTROL PERMIT

SITE CHARACTERIZATION, FACILITY DESIGN, OPERATING PLANS, MONITORING

What does NDEP Evaluate in the Application?

Site Characterization



What waters (surface and underground) are nearby? Are they jurisdictional? What type of rock is being mined? What contaminants of concern could mobilize from it?

Facility Design





Will there be an open pit? A pit lake? underground mine?

Does every component meet required design standards?

Operating Plans

How will ore be processed? Where will mining waste be placed?



What monitoring is needed to ensure controls are effective?

What will happen if there is an emergency?

How will the mine be closed?

MINING WATER POLLUTION CONTROL PERMIT

WHAT'S THE TIMELINE?

Timpling for Thacker Pace Lithium Mine WPCP Application

Timeline for macker Pass Lithium Mine WPCP Application		
April 3, 2020	Application Submitted	
July 17, 2020	Application Deemed Administratively Complete	
July 17, 2020	Technical Review Begins	
October 29, 2020	Technical Questions Issued to Applicant	
December 29, 2020	Additional Technical Questions Issued	
March 1, 2021*	Response Received from Applicant	
Spring 2021*	Draft Permit and Public Notice Issued 30-Day Public Comment Period Begins	

Notice of Decision Regarding Permit Issuance

Public Hearing (Not Required Unless Requested; Highly Likely)

Summer 2021*

Summer 2021*

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^{*}BMRR is currently reviewing LiNV responses to our technical questions. Draft permit issuance, public comment period, hearing and decision dates are dependent on the content of the responses, as well as the content of public comments. This is a tentative timeline and additional time may be required.

BUREAU OF MINING REGULATION AND RECLAMATION

WHAT HAPPENS AFTER A PERMIT IS ISSUED?

Inspections, Compliance Monitoring, Reporting, Enforcement

Quarterly Inspections



Verify Field Conditions

Construction & Disturbance QA/QC

Waste Rock & Tailings Placement

Housekeeping & Evidence of Spills



Condition of Containments & Chemical Storage

Success of Reclamation & Vegetation

Processing Facility Operations

Ongoing Compliance Monitoring

Quarterly Groundwater Sampling



Weekly Leak Detection Monitoring

Ore and Waste Sampling

Reported to NDEP Quarterly

Enforcement for Noncompliance



Work Plans to Remediate Issues

Fines & Penalties

Permit Revocation





MINING PERMIT INFORMATION

WANT TO KNOW MORE?

Visit our website:

- https://ndep.nv.gov/land/mining
- List of Applications Currently Under Review
- Mining Records Search
- General Information, Maps, and FAQs
- Bureau Contacts

DCNR Mining Blogs: http://dcnr.nv.gov/blogs

Mining





Mining

- > What's New In BMRR?
- > Mining Information and FAQs
- > Mining Records Search
- > Laws & Regulations
- Regulation Branch
- > Reclamation Branch
- > Closure Branch
- > BMRR Database Reports and Map Resources
- > BMRR Contacts

CLASS II AIR QUALITY OPERATING PERMIT PROCESS

The air quality operating permitting process is detailed and complex, but generally consists of:



Administrative Completeness Review



Technical Review



Public Notice



Public Hearing



Comments Review



Permit Decision

BUREAU OF AIR POLLUTION CONTROL

CLASS II AIR QUALITY OPERATING PERMIT PROCESS



Administrative Completeness Review (10 working days)

- Emission Units
- Air Pollution Control Devices
- Stack Parameters
- Emissions Calculations and Potential to Emit
- Surface Area Disturbance
- Environmental Evaluation and Air Dispersion Modeling
- Process Narrative/Flow Diagrams/Site Plan



Technical Review (60 calendar days)

- Emissions Calculations Verification
- Federal/State Applicability Determinations
- Air Dispersion Modeling Analysis Verification
- Requests for Information
- Draft Permit & Technical Review Document

CLASS II AIR QUALITY OPERATING PERMIT PROCESS

What Can You Expect to See in the Air Permit?

General Conditions

Specific Operating Conditions

Throughput Limits

Emission Limits

Monitoring, Recordkeeping & Reporting

Source Testing

Specific Federal Regulations

Surface Area Disturbance & Fugitive Dust

BUREAU OF AIR POLLUTION CONTROL

CLASS II AIR QUALITY OPERATING PERMIT PROCESS



Public Notice (30 days)

- **Proposed Permit Decision**
- Posted on https://ndep.nv.gov/posts/category/air
- To receive notices, sign up at https://ndep.nv.gov/ under Get Notices and select "Air Quality Info & Notices"



Public Hearing

Additional opportunity for public comment

BUREAU OF AIR POLLUTION CONTROL

CLASS II AIR QUALITY OPERATING PERMIT PROCESS



Comments Review

- Written comments from the public
- Comments made during the public hearing



Permit Decision

- State and federal air quality requirements
- Maintenance of national and state ambient air quality standards
- State Implementation Plan
- Expiration, Renewal & Revision

WHAT FACTORS INFLUENCE THE DECISION TO ISSUE OR DENY A PERMIT?

Does the Application Satisfy Applicable State Laws and Regulations?

Nevada Laws:



Air Pollution NRS 445B.100 - 640

Nevada Regulations:



Air Controls NAC 445B.001 - 390

Federal Regulations:



New Source Performance Standards

40 CFR Part 60

National Emission Standards for Hazardous Air Pollutants

40 CFR Part 63

Big Picture Questions:

Will all ambient air quality standards be met? | Will the required emission limits be met? Will Public Safety and Health be protected?



BUREAU OF AIR POLLUTION CONTROL CLASS II AIR QUALITY OPERATING PERMIT PROCESS

Timeline for Thacker Pass Lithium Mine Application		
January 26, 2021	Application Submitted	
February 9, 2021	Application Deemed Administratively Complete	
February 10, 2021	Technical Review Began	
February 24 to April 2, 2021	Additional Information Requested and Received (extended regulatory timeframe 37 days)	
May 14, 2021*	Technical Review Ends & Intent to Issue or Deny Due	
May 17, 2021*	Public Notice Begins	
June 16, 2021*	Public Hearing & Public Notice Ends	
June 17, 2021*	Comments Review Begins	
To Be Determined	Final Permit Decision	

^{*}This is a tentative date. If there are days we wait for requested additional information, the timeline will be extended by that number of days, and this date will be revised.

WHAT HAPPENS AFTER A PERMIT IS ISSUED?

Testing, Inspections, Reporting, Monitoring, Enforcement

Testing



Initial Opacity Compliance Demonstrations

Initial Performance Tests

Initial Certification Test of Continuous Emissions Monitoring (CEMS) Unit



Annual/Renewal 3rd Party Emissions Stack Testing

Annual 3rd Party Stack Testing for Comparison with CEMS Unit

Testing Observed and Validated/Invalidated by NDEP Inspectors

Inspections





Ensure Throughputs & Emissions are within Limits Ensure Controls are Installed & Operating Properly Review Required Records

Investigate/Resolve Complaints

Reporting



Annual Emissions Reporting Excess Emissions Reporting (24-hour and 15-day)



WHAT HAPPENS AFTER A PERMIT IS ISSUED?

Testing, Inspections, Reporting, Monitoring, Enforcement

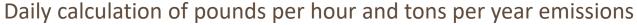
Ongoing Compliance Monitoring

Continuous monitoring of sulfur dioxide emissions at sulfuric acid plant



- Daily calibration of CEMS Unit
- Quarterly Audit of CEMS Unit

Daily monitoring of material throughput and operating hours

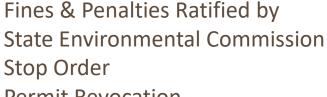


Monthly inspection of air pollution control equipment

Monthly visible emissions observations









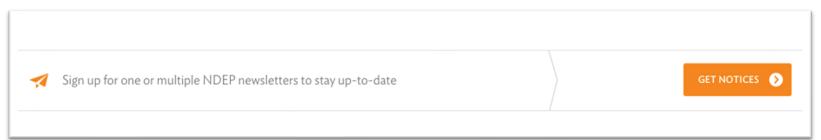


NDEP PERMITTING PROCESS

How Can the Community Engage?

Sign Up to Receive Public Notices

- https://ndep.nv.gov/posts
- Scroll to the bottom of the page
- Click "Get Notices" on the right side
- Choose
 - "Mining Regulation and Reclamation Notices",
 - "Air Quality Info and Notices"
- You will be notified when a Notice of Proposed Action is posted and the 30-day public comment period begins.
- Read the Notice, Draft Permit and Fact Sheet; send us your comments and/or request a hearing



NDEP PERMITTING PROCESS

TIPS FOR PROVIDING EFFECTIVE PUBLIC COMMENTS

A comment can simply express general support or dissent for the permitting action, but the permitting process is not a vote.

How can your comment be most effective?

Provide reasons for your support or dissent:



Specific data and sources

Specific impacts



New information

Avoid opinion-based comments



Identify your experience

Include specific actions the agency should take

If you have questions, contact us!

Remember...

The permitting process is in place to ensure the Agency's decisions comply with environmental laws.

Good comments can improve the final permit!

OTHER PERMITS (NOT NDEP)

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NEVADA BUREAU OF MINES AND GEOLOGY Special Publication L-6 STATE AND FEDERAL PERMITS REQUIRED IN NEVADA BEFORE MINING OR MILLING CAN BEGIN

Compiled by Lucia M. Patterson, Nevada Division of Minerals Last Updated June 2018 Last Revised May 2009

This is a list of State and Federal permits and actions required during planning, development, construction, and before operation of Nevada mines and mills. We hope it will help both individuals and companies through the complex, often confusing regulatory maze - please understand that not all of these permits are necessarily required for all operations.

Remember that in addition to State and Federal permits, County and City permits may be required. We have attempted to include a general description of County and City permits necessary. As these may vary, it is suggested you contact the local County Planning commission for specific requirements.

This list will be revised periodically, however, the user should be aware that there may be additional, new, or revised regulations issued after this list was compiled. We welcome any additions and/or corrections, as well as any suggestions on how to improve this list. For more information about permitting, contact: Nevada Division of Minerals, 400 W. King Street, Suite 106, Carson City, Nevada 89703, (775) 684-7040 or e-mail to mvisher@minerals.nv.gov.

STATE REQUIREMENTS

MINE REGISTRY FORMS	
	Nevada Division of Minerals (http://minerals.nv.gov)
Agency to contact	Carson City Office: 400 W. King St., Suite 106, Carson City, NV 89703
	Phone: (775) 684-7040. Fax: (775) 684-7052
	Las Vegas Office: 2030 E. Flamingo Rd., Suite 220, Las Vegas, NV 89119 Phone: (702) 486-4343. Fax: (702) 486-4345
When Required	
	Operators shall submit a completed form for registration
Administrative Authority	NRS 513.063 and 513.073
Administrative Authority	NAC 513.100
ANNUAL STATUS AND PR	RODUCTION REPORT
Agency to Contact	Nevada Division of Minerals (http://minerals.nv.gov)
	Carson City Office: 400 W. King St., Suite 106, Carson City, NV 89703
	Phone: (775) 684-7040, Fax: (775) 684-7052
	Las Vegas Office: 2030 E. Flamingo Rd., Suite 220, Las Vegas, NV 89119
	Phone: (702) 486-4343, Fax: (702) 486-4345
When Required	On or before April 15 of each year
Required Action	Operators shall submit a report relating to the annual status and production of the mine for the preceding calendar year
Legal Authority	NRS 513.063 and 513.073
Administrative Authority	NAC 513.120
FEES FOR ABATEMENT O	OF HAZARDOUS CONDITIONS AT ABANDONED MINES
Agency to Contact	Nevada Division of Minerals (http://minerals.nv.gov)
	Carson City Office: 400 W. King St., Suite 106, Carson City, NV 89703
	Phone: (775) 684-7040, Fax: (775) 684-7052
When Required	Within 30 days after approval of a Federal plan of operation or amended plan of
TTTOTT TO QUITOU	operation
Required Action	Operator to provide Division of Minerals copy of filing of plan of operation or amended
	plan of operation; fee; refunds; use of money collected; Division to file report with

Governor and Legislature.

Multiple Federal, State, and Local Permits are Required in Nevada before Mining or Milling Can Begin



Special Publication L-6
Published by the Nevada
Bureau of Mines and
Geology

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